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# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
Executive Director

### Division of Oil Gas and Mining

JOHN R. BAZA  
Division Director

March 19, 2008

Randy Marriott  
Marriott Rock Products, LLC  
5238 West 2150 North  
Ogden, UT 84404

Subject: Review of Notice of Intention to Commence Large Mining Operations, Marriott Rock Products, LLC., Rocky Point Gravel Mine, M/003/0079, Box Elder County, Utah

Dear Mr. Marriott:

The Division has completed our review of your draft Notice of Intention to Commence Large Mining Operations for the mine, received October 31, 2007. The attached comments will need to be addressed before tentative approval may be granted.

The comments are listed below under the applicable Minerals Rule heading. Send replacement pages of the original notice **using redline and strikeout text** and indicate how these are to be incorporated into the current approved plan using Form-MR-REV-att found on the Divisions web page. After the notice is determined technically complete you will be asked to send us two final clean copies, one will be returned.

The Division requests that submittals are made according to the following format. Notices and changes should be three hole punched, maps folded and placed in a plastic 8 ½ by 11 sleeve, and binders provided for new notices, revisions, applications, or other changes of 30 pages or more (binders need only be provided once). An additional electronic copy is appreciated. You may request some proprietary information relating to the location, size, and nature of the mineral deposit to be kept confidential. Confidential information must be clearly marked and provided in a separate binder.

If you have any questions in this regard please contact me, Lynn Kunzler (801)538-5310, Tom Munson, (801)538-5321 or Beth Ericksen (801)538-5318 of the Minerals Staff. If you wish to discuss this review, please contact us at your earliest convenience. Thank you for your cooperation in completing this permitting action.

Sincerely,

*Renny Berry for*  
Susan M. White  
Mining Program Coordinator  
Minerals Regulatory Program

SMW:lk:pb  
Attachment: Review, Form MR-REV-att  
O:\M003-BoxElder\M0030079-RockyPointGravel\draft\REVIEW-01312008.doc



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**Marriott Rock Products, LLC  
Rocky Point Gravel Mine**

**M/003/0079  
January 31, 2008**

**R647-4-104 – Operators, Surface and Mineral Owners**

- 104.2                      Provide phone numbers for adjacent landowners. (BE)  
Is 90587 aware of the mining operations? Is this area disturbed by mining operations? (BE)

**R647-4-105 - Maps, Drawings & Photographs**

General Comments: It is helpful to reference the maps by name or id number in the narrative. This plan has been submitted on a Division checklist form without narrative. Narrative provides necessary information in knowing if map requirements are omitted accidentally or if the features just don't exist. (BE)

The base map provides some of the rule requirements, and perhaps all of them, but it isn't clear. For example, the narrative should reflect that electrical transmission lines don't exist, otherwise show them, or identify which map this information is located. Please refer to R647-4-105 to determine the statements required. (BE)

Please designate the number of acres on the map that are 'previously impacted-mining' and define what 'previously impacted – mining' means. (BE)

- 105.1    Topographic base map, boundaries, pre-act disturbance  
          Show location of stockpiled fines. (See additional comments under reclamation plan) (BE)  
          Show well locations. (BE)  
          Because the depth to groundwater is variable, please plot the location of local wells and the depth to groundwater for these wells on the base map. (BE+TM)
- 105.2    Surface facilities map  
          The surface facilities map shows the facilities in a black hatch, however, they are not identified specifically. There is no reference in the legend. (BE)
- There is an orange rectangle referred to as Questar Gas, however there is no indication of what the orange rectangle represents. (BE)
- 105.3    *Drawings or Cross Sections (slopes, roads, pads, etc.)*  
          Please supply a watershed map showing surface water runoff is being treated before leaving the disturbance. (TM)

A legend should be provided on this map to identify the color and hatching meanings on the cross sections maps. (BE)

Please provide a final reclamation pit configuration map. The submitted maps show the property boundary but it is not clear what areas are specifically being reclaimed. (BE)

Per above comment, provide a profile of the benched 1:1 slopes. Ensure the following information is included, but not limited to: Bench height, bench face angle, bench widths. (BE)

The submitted geologic map shows a blue dashed line that outlines the "proposed gravel mine area", however it is not clear how it fits within the overall mine area. Please clarify with a north arrow and other clarifying features. More related information below. (BE)

The geology map should have a legend and include contour intervals. There is narrative that explains the formations; it would be helpful to refer to the information in the legend. (BE)

#### 105.4 Photographs

### **R647-4-106 - Operation Plan**

**General Comment: The phased portions of the mining operations must be shown on a map, labeled with phase dates and acres for each phase. (BE)**

- 106.3 Estimated acreages disturbed, reclaimed, annually.  
In table form, provide an estimation of acres to be disturbed and reclaimed annually. (BE)
- 106.4 Because this operation is being phased, please indicate duration of phase one. (BE)  
In table form, provide the annual tons of material to be mined. (BE)  
There is limited information about the nature of the materials to be mined. Please identify the unconsolidated and consolidated areas. Include thicknesses. Discuss mining sequence or pattern. (BE)
- 106.8 Please identify the 'lowest elevation of the project' (BE)
- 106.9 *Location & size of ore, waste, tailings, ponds*  
The current detention pond is shown on existing maps, a new pond is proposed to be built but no dimensions or location are shown. Please provide this information in conjunction with a contributing watershed and what the design storm will be. The plan references a 100 year storm but does not give a duration of storm event. Please provide that duration and watershed area contribution. (TM)
- 106.10 Please provide information about the amount of material to be moved in each phase and overall. (BE)

**R647-4-109 - Impact Assessment**

*109.1 Impacts to surface & groundwater systems*

The plan shows the location of sediment retention basins but does not provide the typical designs for these structures (a drawing showing a typical design would be sufficient). (TM)

It is unclear how runoff is prevented from leaving the site. Please show internal drainage patterns and watershed areas contributing to drainage within the mine on the appropriate figure. How will this drainage be treated before leaving the site? (TM)

The current sediment pond has a flow through outlet or straight culvert outlet. It would be appropriate to put a 90 degree riser and a trash rack on this outlet to provide more storage capacity for storm water and sediment. This would prevent a failure in case of flooding blocking the existing culvert as it appears to be located directly above a house. Please provide the information that shows that failure of this structure would not impact offsite structures. (TM)

Please provide the SWPPP plan as part of the document. (TM)

*109.4 Slope stability, erosion control, air quality, safety*

**Slopes**

If a mined area exists, but is not currently being worked, what measures are implemented to ensure it is environmentally stable? Will slopes be left at a stable angle until the area is mined again? Is there a monitoring program in place to ensure slope stability regarding current slopes? (BE)

The plan narrative indicates that slopes will be reclaimed to 1:1. In order to reduce the reclamation liability and costs for final slope configuration, close to final slopes need to be achieved during mining. Please discuss how the mining plan will achieve the desired postmining slopes. (BE)

**Erosion control**

Operationally, while various areas are being developed what methods are implemented to minimize erosion and provide adequate drainage? (BE)

Provide information about how runoff is managed in the facilities area. (BE)

How is runoff and erosion control managed on the slopes? (BE)

What methods are used to maintain pit roads and access roads to minimize erosion and runoff? No blocking or restrictions that impede drainage or adversely affects the road(s)

should occur please provide verbiage containing this information. (BE)

What is the grade of the haul roads? If they vary, provide details such as the maximum grade and distance as well as the minimum grade. (for erosional information) (BE)

#### **Air quality**

Provide a copy of the Air Quality permits as an appendix to the plan including the dust control plan. More narrative is required about developing pit roads and how dust control is managed during that effort. Include the distance of the nearest current mine road locations to the pit boundary (in all directions). If this information is in the dust control plan, please indicate. (BE)

If water is used for dust suppression, what is its source? (BE)

#### **Public Health and Safety**

Deficient. This component of the plan must be addressed. (BE)

109.5 Actions to mitigate any impacts

### **R647-4-110 - Reclamation Plan**

#### *110.1 Current & post mining land use*

While the Division recognizes that post mining land use may be residential/commercial, until evidence is provided at the end of mining that supports this use, the area will need to be reclaimed to agricultural or undeveloped (wildlife habitat) uses. Evidence that will need to be supplied at the end of mining for commercial/residential use will include a demonstration that the intended use meets local zoning ordinances, and the issuance of building permits for commercial/residential units. (lk)

Because the submitted reclamation plan indicates the post mining land use as residential/commercial, not only will the post mining land use need to be modified (per above comment), but the outline and narrative of the entire reclamation plan requires further evaluation and modification as well. (BE)

#### *110.2 Roads, highwalls, slopes, drainages, pits, etc., reclaimed*

The impoundment to be left will have to be approved as part of the post mining land use. Without plans, the language stating that an impoundment will be left can not be approved. Please change this statement on page 19 and 20. Leaving the impoundment won't be considered until the time of reclamation. (tm)

Slopes

The plan indicates that the slopes will be 1:1, however there is no information included about slope heights. See comment in maps under 'base maps'. (BE)

The slope reclamation narrative will require a map showing the final slopes, areas labeled and identified on a topographic base. (BE)

Provide the grade of the pit floor. It would be informative to create a composite line of the upper and lower areas so that the grade of the missing line segments can be determined. State this information in the narrative as well. (BE)

Ensure there is discussion about the erosion control plan. (BE)

- 110.5 There have been several comments made in the narrative that indicate that fines will be used as growth media. However, there is no discussion in the text describing how, when or where these fines will be obtained. The maps section asks to show the location of the fines pile, but will depend on the above requested discussion. Ensure the maps accurately reflect this plan. (BE)

Some of the comments on page 19 of the plan may not apply once the post mining land use is changed. If it remains basically the same, please ensure areas of unconsolidated materials. (BE)

#### **R647-4-112 – Variance**

Variance request for lack of available topsoil was based on mining a previously disturbed area where topsoil did not exist. It appears that the base map shows only a portion of the mining operations area to be considered 'previously disturbed'. There is no identification on any of the maps that show location and size of phase one. More information is needed to issue a variance for a large mine application. A variance for not salvaging topsoil is not needed if no topsoil was present at the beginning of this current mining operation. However, salvage growth material is required. (BE)

#### **R647-4-113 – Surety**

**The comments below are not comprehensive, but provide an overview of some concerns. The Division appreciates using page numbers in the spreadsheet fields as a cross reference for reference ease. In addition, providing a surety cost estimate table of contents is excellent as well. Please create two sections in the surety spreadsheet, a direct costs section and an indirect costs section. Post closure monitoring will be a separate section. Please structure the spreadsheet in this way. (BE)**

**Please structure the spreadsheet to show the various 'phases'. The Division is willing to assist in this request, please contact the Division lead, Beth Ericksen. (BE)**

No information is provided regarding the dimensions of the sediment retention pond. (BE)

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For surety reasons, volumes, dimensions, etc. need to be used instead of phrases such as, 'the mine will have an abundance of unconsolidated material', 'the soils needed for reclamation will be a combination of unconsolidated materials from the mine and composted manure'. Please look throughout the narrative for these types of phrases, and replace with quantifiable numbers. (BE)

It is difficult to understand phrases like 'one area will need', that one area must be defined and shown on a map. The plan becomes confusing when these inconsistencies occur. (BE)

Provide all equipment that will be used at reclamation in a table and identify its reclamation application. (BE)

Do the above for operations equipment. (BE)

Costs must be provided for removal of facilities, water tanks, electrical lines, etc. (BE)

Once public health and safety issues are addressed in the impact assessment portion of the plan, there will be related costs in the surety portion of the plan as well. Please identify and incorporate them. (BE)

There is no erosion control costs in the surety, please identify the erosion control measures in enough detail to establish costs. (BE)

Always reference costs sources. (BE)

Please provide a complete list of equipment and vehicles, and their application. This comment may have been repeated elsewhere in this review. (BE)

Is there a lay-down area that requires removal and disposal of solid waste materials? (BE)

The equipment list has no basis for \$2000/pc of equipment for mob/demob. Always identify cost sources. (BE)

What are the infrastructure removal costs? It is expected there are costs associated with the removal of generators, pumps, gates and signs etc. They must be listed and show costs. (BE)

There are no monitoring costs associated with revegetation and slopes. These costs must be included. (BE)

Provide dimensions of all bench surface areas. BE

Escalation rate is 3.2% until April 2008. (BE)